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## **WE CLAIM:**

- The EF-Tu protein encoded on the plastid DNA of the malaria parasite *Plasmodium* falciparum.
  - 2. The protein according to claim 1 which has the sequence labelled "eftu\_pf" in Figure 2A (SEQ ID NO:2).
- The protein according to claim 1 or 2 in purified form.
  - 4. A DNA molecule encoding the protein of claim 1 or 2.
- 5. The DNA molecule according to claim 4 which comprises the sequence shown in Figure 2B (SEQ ID NO:1).
  - 6. The DNA molecule according to claim 4 in purified form.
  - 7. The DNA molecule according to claim 4 which is a cloning or expression vector.
  - 8. A host cell transformed with the vector of claim 7.
  - 9. A method of producing the EF-Tu protein encoded on the plastid DNA of the malaria parasite *Plasmodium falciparum*, which method comprises
    - (i) culturing a host cell containing a DNA molecule encoding the protein under conditions such that the protein is expressed; and
    - (ii) recovering the protein from the culture.
  - 10. A method of identifying an anti-malarial compound, which method comprises

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- (i) contacting a compound with the EF-Tu protein encoded on the plastid DNA of the malaria parasite *Plasmodium falciparum*; and
- (ii) determining whether the compound binds to or inhibits the protein, any such binding or inhibition being indicative that the compound is an anti-malarial.
- 11. A compound identified by the method of claim 10.
- 12. A method of preventing or treating infection of a patient with the malaria parasite

  Plasmodium falciparum, which method comprises administering to the patient a compound which inhibits the EF-Tu protein encoded on the plastid DNA of said malaria parasite.
  - 13. The method according to claim 12 wherein the compound is an antibiotic.
- 15 14. The method according to claim 13 wherein the compound is a member of the kirromycin series of antibiotics.
  - 15. The method according to claim 14 wherein the compound is selected from the group consisting of kirromycin (mocimycin), aurodox (1-methylmocimycin), efrotomycin, enacyloxin IIa and GE2270.
  - 16. An antibody specific for the EF-Tu protein encoded on the plastid DNA of the malaria parasite *Plasmodium falciparum*.
- 25 17. A method of identifying an anti-malarial compound, which method comprises
  - (i) contacting a test compound with the 23S ribosomal RNA encoded on the plastid DNA of the malaria parasite *Plasmodium falciparum* (pf 23S rRNA<sub>pl</sub>) or with a fragment of said RNA containing the GTPase domain; and
  - (ii) determining whether the compound binds to said RNA or said fragment, any such binding being indicative that the compound is an anti-malarial.

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## 18. A method according to claim 17 which comprises

- (i) incubating the Pf 23S rRNA<sub>pl</sub> or the fragment thereof with the test compound and a reference compound known to bind to the rRNA or the fragment;
- (iia) determining the amount of reference compound that is bound to the rRNA or the fragment; and
- (iib) comparing the amount of reference compound bound to the rRNA or the fragment with the amount that is bound in the absence of the test compound;

wherein any reduction in the binding of the reference compound in the presence of the test compound compared to the binding in the absence of the test compound is indicative that the test compound is competing for binding to the rRNA and that the test compound could be an anti-malarial.

- 19. The method according to claim 18 wherein the reference compound is thiostrepton.
- The method according to claim 17 wherein said RNA or said fragment contains an
   A residue at the position corresponding to position 1067 in the 23S rRNA of Escherichia coli.
  - 21. The method according to claim 20 wherein said fragment comprises the pf 23S rRNA<sub>pl</sub> sequence corresponding to the sequence from about position 1051 to about position 1108 of the 23S rRNA of *Escherichia coli*.
    - 22. A compound identified by the method of claim 17.